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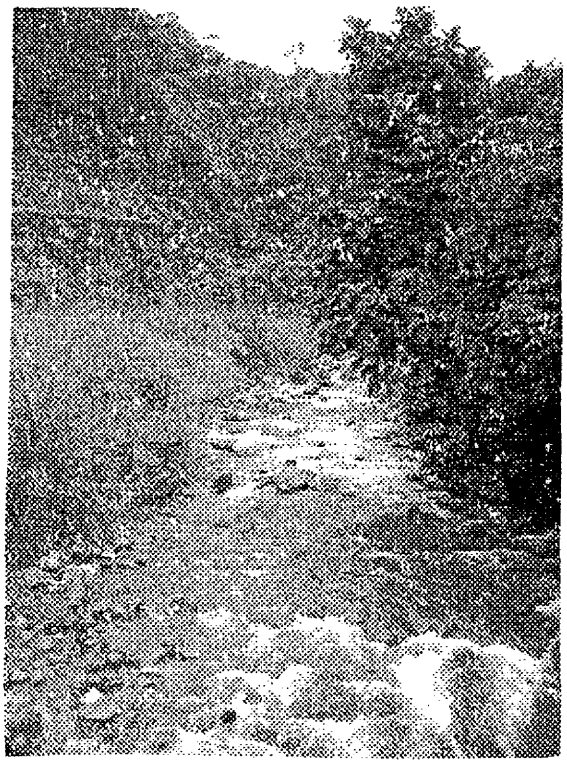

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Conservation of Archaeological Sites for Ecotourism in Malaysia: Issues & Challenges

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Introduction

Archaeological sites have developed into an essential part of the tourism industry in many countries of the world. In some countries, archaeological sites have not only become an important part of the tourism industry but also form a leading sector of the national income, earning millions of dollars every year. These include, amongst others, the terracotta army of China's first emperor in Xian, the ancient pyramids of Egypt and Central America, the stone age cave paintings of Lascaux in France, the ancient temples of Angkor in Cambodia, Borobudur in Indonesia, and Ayutthaya in Thailand.

In Malaysia, intensive and systematic archaeological research during the past 15 years or so, spearheaded by the Centre For Archaeological Research Malaysia in Universiti Sains Malaysia, Penang has discovered many new sites and produced significant results and deepened our knowledge about the prehistory of Malaysia (Zuraina 2003, Mokhtar 1997, Chia 2003, 2001, 1997). The recent archaeological research had also began to renew interests in developing and promoting archaeology as a form of ecotourism but these efforts have been faced with numerous issues and challenges. One of the main issues is the need to conserve archaeological sites from destruction because of the rapid pace of economic development in Malaysia, especially in the past 10 years or so. Sites have been uncovered and damaged during major digging works such as the construction of highways, roads, opening of farmlands, building of dams, and housing estates.

An important role archaeology and ecotourism can play is to educate the public on the importance and the need to save our cultural heritage. More importantly, there is an urgent need to introduce sustainable development and management of archaeological sites in order to provide long-term economic benefits for the ecotourism industry and to preserve the cultural heritage of Malaysia. This paper will discuss the main issues and challenges in the conservation of archaeological sites for ecotourism in Malaysia.

Archaeological Sites in Malaysia

In Malaysia, most of the archaeological sites discovered in the country have been cave or rockshelter sites located in limestone hills. This is mainly because tropical field conditions such as thick undergrowth and jungles often made it difficult to locate open sites. Archaeological surveys and excavations in Malaysia often uncovered prehistoric sites used for habitation, temporary camp, burial or stone-tool making. These sites often contain prehistoric remains such as stone tools or artefacts, pottery, human skeletal remains, food remains such as animal bones and shells as well as ornaments or metal objects.

Archaeological sites that have become part of the tourism industry in Malaysia include sites such as the Niah and Mulu Caves in Sarawak, the Lenggong Valley in Perak and the Bujang Valley in Kedah. The Niah and Mulu Caves in Sarawak have attracted thousands of local and foreign tourists each year because of they contained archaeological discoveries as well as fascinating cave formations and

natural environments. Some of the excavated artefacts at these sites are exhibited at the site museum in Niah. The Lenggong Valley in Perak, on the other hand, had only recently become known because of recent discoveries, which include the oldest stone age site in Malaysia and the discovery of the "Perak Man" - one of the oldest and most complete human skeleton in Southeast Asia (Zuraina 1994, Chia & Sam 1994). Because of these important archaeological discoveries as well as the fact that the Lenggong Valley contains beautiful natural environment such as the Raban lake, the Perak river, the Kekabu waterfall, and the tropical forests, the state and federal governments have invested money to built an archaeological museum, accommodations and other facilities to attract tourists to Lenggong. The Lenggong archaeological museum, which was officially opened recently in July 2003 by the Sultan of Perak, had thus far attracted thousands of visitors. Its main attraction, the "Perak man", has not only managed to draw many tourists to Perak but also to other parts of Malaysia and Japan when it was featured during the numerous archaeological exhibitions. The "Perak Man" exhibition in Pasir Salak Museum, Perak in 1997, for instance, attracted thousands of visitors with ticket sales amounting to more than Rm10,000 daily.

Archaeological sites and artefacts, however, are seldom discovered in well-preserved state and they are among the most vulnerable of human cultural heritage that have suffered extensive damages. Archaeological excavation is destructive and the removal of artefacts from sites had often caused abrupt changes to their ambient preserving conditions. As most archaeological sites and artefacts are already in the advanced state of deterioration, exposure to high temperature and high relative humidity, especially in Asian countries like Malaysia, can and have caused further damage to our cultural heritage. Other factors such as air pollution, chemical action of light, and bio-degradation caused by fungus and insect attack have also brought about the deterioration of these materials.

In order to recover and in some cases to save these sites and artefacts, conservation treatment may be required in the field as well as in the laboratory. Given that an archaeological site is often discovered in an advanced state of deterioration, its protection and preservation becomes a challenging task. In the last 10 years or so, many archaeological sites have been subjected to the constant threat of destruction due to the rapid pace of development in the country. Sites have been uncovered and damaged during major digging works such as the construction of highways, roads, opening of farmlands, building of dams, and housing estates. Cave sites that often contained important archaeological evidence were destroyed by guano digging and quarrying activities. For instance, the limestone cave of Gua Badak in Lenggong, Perak that contained ancient cave paintings was destroyed during quarrying activities. Limestone hills containing several caves of archaeological importance were believed to be have been lost underwater during the construction of a dam at Kenyir Lake in Ulu Terengganu between 1978 and 1985 (Price 2002).

Conservation Issues and Challenges

Archaeological sites and artefacts are protected under separate laws in three different regions in Malaysia, namely Peninsular Malaysia, Sarawak and Sabah. In Peninsular Malaysia, they are protected under 'Akta 168" of the Antiquities Act 1976, which provides for the control, preservation, and study of ancient and historical monuments, prehistoric sites, prehistoric and historic artefacts as well as matters related to trade and export of prehistoric and historic artefacts. Under this act, the approval from the Department of Museums and Antiquity Malaysia is needed in order to excavate archaeological sites and artefacts. In Sarawak, the Sarawak Cultural Heritage Ordinance 1993, which replaced the Antiquities Ordinance 1958, protects archaeological sites and artefacts in the state. This ordinance provides provisions for the preservation of antiques, monuments and sites of cultural, archaeological, architectural, artistic, religious or traditional interest or value for the benefit of the state and as a heritage of the people. In Sabah, the Antiquities and Treasure Trove Enactment No.11

of 1977 provides for the control and preservation of ancient and historical monuments, archaeological sites and remains, antiquities and other cultural properties of national interest.

Despite these protective laws, however, there are still many areas in these laws that still need to be improved in order to keep up with changes in the country. One such improvement is the need to protect archaeological and historical sites from destruction due to the rapid pace of development in Malaysia. At present, the environmental impact assessment (EIA) of development projects is controlled and governed separately and differently by each of the 13 or more states in Malaysia. In order to have more uniformity and better control over decisions regarding the need for EIA of development projects, the Ministry of Science, Technology and Environment Malaysia is currently trying to place all EIA projects under the approval of the federal government. However, the inclusion of archaeological impact assessment study has yet to be made mandatory in all EIA projects in Malaysia.

Nevertheless, the awareness of the importance and the need to save the country's archaeological heritage from further destruction had slowly become more apparent during the last 10 years or so. During this period, some major projects in the country had begun to include archaeology in their Environmental Impact Assessment studies. For examples, archaeological impact assessment study of the Petronas Gas Utilisation Project in Peninsular Malaysia from 1989-1995 and the construction of the Bakun Dam in Sarawak from 1994-1995. Several megalithic sites in the Negri Sembilan–Melaka area were excavated in 1989 and relocated to Kuala Lumpur during the construction of the Petronas Gas pipelines (Zuraina 1993). During the construction of the Bakun dam in Sarawak, many old burial grounds of the communities affected by the floods due to the construction of the dam were identified and an ancient habitation area was excavated. Some of the burials were exhumed and relocated to higher grounds in the new resettlement areas.

In 1996, the oldest palaeolithic site of Bukit Jawa in Lenggong, Perak, dated about 200,000 years old, was uncovered accidentally during the construction of a highway from Kuala Kangsar to Grik. A villager who had worked with us at archaeological sites in Lenggong for several years notified our Centre about findings of stone tools during the construction of the highway. Subsequently, the Department of Museums and Antiquity Malaysia with the cooperation of the Road Works Department of Perak halted the construction of the highway for a period of more than one month in order to allow our archaeological team from the Archaeological Centre at University of Science Malaysia, Penang to conduct rescue excavations and to collect data and artefacts at the affected areas in Bukit Jawa (Zuraina 1997).

Another major problem is the lack of awareness on the importance of preserving cultural heritage in Malaysia, for example, at Gua Badak in Perak, the state Department of Land Survey approved the quarrying of the limestone hill that contained prehistoric cave paintings – parts of it was destroyed before it was reported to the Department of Museum and action was taken to stop the project. In addition, most of the sites with cave paintings in Malaysia suffered from graffiti and looting. Changing religious values can also threaten archaeological sites such as the case in the highlands of Bario, Sarawak where megalithic stone structures were under threat of being destroyed because most of the local Kelabits had embraced Christianity and denounced the worshipping of these stone structures. In recent years, there are also problems in the protection of historical buildings and underwater sites. Divers and treasure hunters were reported to have looted priceless and valuable artefacts under the sea off the coasts of Johor and Sabah. All these examples seemed to suggest that the present laws and measures are not enough to protect archaeological sites and artefacts from destruction. The Department of Museums and Antiquity Malaysia is currently pushing for amendments to the Antiquities Act 1976 to save our cultural heritage, following the poor preservation of artefacts and in particular the destruction of historical monuments and looting of sunken treasures.

The amendments would cover gazetting and the control of historical buildings and sites from intrusion, destruction as well as control of treasures and sunken vessels. This is also to ensure that valuable artefacts are not stolen or damaged. Heavier penalties will be imposed on offenders if the proposals are approved, which will also grant more power to the state government to protect and to monitor historical sites and sunken vessels.

There is also the lack of well-trained conservators in Malaysia with good scientific knowledge and skills to solve preservation and conservation problems of sites and artefacts. At present, museum technical staff conducted mostly basic cleaning and maintenance of archaeological sites and artefacts, with little scientific knowledge to tackle new problems in preservation and conservation. The task of saving and conserving archaeological sites and artefacts have been made more challenging by the hot and humid climate, which often speed up the process of deterioration of sites and artefacts. During archaeological excavations, fragile artefacts that need immediate on-site attention are often not given preservation and conservation treatment due to time constraints and the lack of conservation expertise during fieldwork. Instead, dry cleaning or cleaning with water is generally done at the site. Conservation after excavations usually involves preventive treatment - cleaning and treating artefacts to reduce the rate of deterioration. Rarely will curative conservation or restoration be carried out unless for display purposes. These artefacts are later brought back to the laboratories and whether or not these finds will be conserved often depend on the importance of the finds and again the availability of technical expertise. It is common practice that most archaeological finds will only undergo basic cleaning before being studied, exhibited or worst, end up in the store rooms of museums.

The lack of storage space in museums or universities as well as the poor preserving conditions of storing artefacts still remain a huge problem in Malaysia. Every year, considerable amount of artefacts are recovered from archaeological surveys and excavations and this had created much storage problems. Due to the lack of storage space, most artefacts often end up in boxes. The environment of museums display and storage are often not conducive for preservation of artefacts. Artefacts are often stored in hot and humid conditions and air-conditioners are only turned on during office hours (about 8 hours a day) resulting in wide fluctuations of temperatures and humidity.

Conclusions

Given the threat of archaeological site destruction due to the rapid pace of economic development in Malaysia, there is an urgent need to introduce sustainable development and management of archaeological sites in order to ensure long-term economic benefits for the tourism industry. One of the most important issues that must be addressed immediately is surely the awareness of the importance of preserving and conserving archaeological sites and artefacts in the country. The ecotourism industry can play an important role in educating or creating awareness among the public and the relevant authorities regarding the importance of protecting sites and artefacts. Protective laws and measures need to be reviewed and changed in order to keep up with rapid changes in the country. It is commendable that the Department of Museums and Antiquity Malaysia is currently taking steps to review and to amend laws that will further protect archaeological sites and artefacts in the country. Given the problems and high costs of conserving, presenting and maintaining archaeological sites and artefacts, perhaps not all should be preserved or protected - only sites that contain important archaeological discoveries should be rescued and conserved for tourism and the future generations. In addition, more people should also be trained in the field of conservation in Malaysia and close cooperation amongst archaeologists, conservators, museum curators, tourist guides, and the public is needed in order to minimise damages to the original archaeological sites and artefacts and therefore preserve information that they might contain about our prevalent past. Archaeological sites and artefacts are irreplaceable cultural heritage that is becoming an important part of the tourism industry

in Malaysia. In our efforts to provide a more sustainable development, tourism should therefore not sacrifice our cultural heritage but on the contrary, tourism must preserve it for a sustainable tourism.

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